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The Minister of Railways and Canals, submits to the House of Commons, in pursuance of sub-section 2 of section 30 of the National Transcontinental Railway Act, chapter 71 of 1903, a report submitted by the Commissioners of the said railway under date, October 9, 1906, on the surveys and other works under their charge for the year ended June 30, 1906.

THE COMMISSIONERS OF THE TRANSCONTINENTAL RAILWAY.

OTTAWA, October 9, 1906.

The Hon. H. R. EMMERSON, P.C.,
Minister of Railways and Canals,
Ottawa.

SIR,—We have the honour to transmit through you to His Excellency the Governor General in Council our second annual report, being for the year ending June 30, 1906, setting forth the receipts and expenditures in connection with the eastern division of the National Transcontinental Railway, and such other matters in relation to the said railway as appear to be of public interest.

Information in regard to the character of the country through which the railway will run, and as to the progress of the work, is given in the Chief Engineer's report and in the reports of the District Engineers hereto annexed.

SURVEYS.

The surveys have progressed very satisfactorily during the year, and have resulted, in several cases, in effecting savings in distance over that shown by the preliminary lines run. It is hoped that by the end of October a first location over the entire route will have been completed, with the possible exception of thirty-four miles at the westerly end of District 'B,' and sixty-five miles at the easterly end of District 'C,' where, owing to the very rough and broken nature of the country, a number of trial lines have had to be run.

CONSTRUCTION.

Contracts for construction, after having been duly advertised as required by the National Transcontinental Railway Act, have been awarded in each case to the lowest tenderer, as follows :—

District 'B.'—From a point designated on the plans of the Commissioners at the north end of the Quebec Bridge and Railway Company's bridge, in the vicinity of the city of Quebec, to a point near La Tuque, a distance of about 150 miles, to Messrs. Hogan & Macdonell, whose tender, after having been extended and moneyed out on the basis of the Chief Engineer's estimate of approximate quantities, totalled \$5,197,257.

6-7 EDWARD VII., A. 1907

District 'B.'—A steel viaduct about 3,000 feet long across the Cape Rouge valley, in the vicinity of the city of Quebec, the work to be performed in accordance with the general specifications of the Commissioners, and the general specifications for steel bridges and viaducts of the Department of Railways and Canals for Canada, 1905, to the Dominion Bridge Company, whose tender, after having been extended and moneyed out on the basis of the Chief Engineer's estimate, totalled \$358,476.

District 'F.'—From a point designated on the plans of the Commissioners at or near the city of Winnipeg to a point known as Peninsula Crossing, near the junction point of the Fort William branch line of the Grand Trunk Pacific Railway, a distance of about 245 miles, to Mr. J. D. McArthur, contractor, Winnipeg, Man., whose tender, after having been extended and moneyed out on the basis of the Chief Engineer's estimate of approximate quantities, totalled \$13,010,399.

Statement of expenditure, and a report of the Purchasing Department, are annexed hereto. The former shows a total expenditure of \$1,831,263.50. Of this amount our Purchasing Department expended for supplies, &c., \$318,328.72.

The whole respectfully submitted.

C. F. McISAAC,
ROBT. REID,
C. A. YOUNG,
S. N. PARENT,

Chairman.

The Commissioners of the Transcontinental Railway, Ottawa, Ont.

SIRS,—I beg to submit the following report of the work done by the engineering staff of the Transcontinental Railway, from July 1, 1905, to June 30, 1906, and in doing so I beg to call your attention to several facts in connection with this work. Until within the last two or three years all the principal lines of railway constructed in Canada have, in the first instance at any rate, been located and constructed with grades of 1 per cent or over adverse to traffic in either direction, and the Transcontinental Railway may be said to be the first railway in Canada of over three hundred miles in length, which has, in the first instance, laid out its line for construction with grades not exceeding 0.4 feet per hundred adverse to eastbound, and 0.6 adverse to westbound traffic, and with curves of a minimum radius of 1,433 feet, except in a few cases where curves of 955 feet radius have been used. The obtaining of these grades has caused a very large amount of extra work, and the running of many more trial lines. The cost of construction of such a line will also be greater over what would have been necessary had we used 1 per cent grades, but in my opinion the immense advantage of operating such a line will fully warrant the expenditure.

Attached to the end of this report are tables of the various descriptions of lines run up to July 1, 1906, as furnished by the district engineers.

DISTRICT 'A.'

In District 'A,' New Brunswick, eight parties have been employed at various times, and from the middle of October, when it was determined to make a first location of what are known as the 'Back' and 'River' routes, three parties were employed on such location on each of these lines. These parties were disbanded on December 21, and reorganized on May 1, and have nearly completed their work. I expect by the middle of October the results of their work should be in such a shape as to enable a decision being come to as to which of these routes should be adopted. Two parties have also been constantly employed in making a revised and final location of the portions in this district, which are common to either of the above mentioned routes.

SESSIONAL PAPER No. 62

Early in November, 1905, the head office of this district was moved from Fredericton to St. John, which has proved to be a more satisfactory point, and the offices secured much more suitable than those formerly occupied in Fredericton.

The accompanying report from Mr. Guy C. Dunn, District Engineer, 'A,' gives full details of the work accomplished.

HUGH D. LUMSDEN, Esq.,

Chief Engineer, Transcontinental Railway,
Ottawa, Ont.

SIR,—In conformity with your instructions received by letter of July 11 last I herewith beg to submit the following general report of work done on this district from July 1, 1905, to June 30, 1906.

GENERAL DESCRIPTION OF WORK DONE.

During the year eight full survey parties, and one small bridge party with a Davis Calyx drill were at work for various periods on trial line, preliminary location, revised location and bridge surveys on the district. During the year many preliminary surveys were run on the alternative routes with a view to shortening and improving the curvature and gradients; and, under instructions received from you, on October 14 last three parties were started on preliminary location between Chipman and Grand Falls on what is known as the river route, and three other parties placed between the same points on the back route with a view to making a survey that would give sufficient information to decide on the merits of these two alternatives. As it was thought advisable not to continue these locations through the winter months all the field parties were called in on December 21. On May 1 eight parties reassembled and continued their preliminary location lines in the various parts of the district, as well as resuming preliminary location on the alternative back and river routes. At the end of June last preliminary location had been tied in on the back line survey between Chipman and Grand Falls, and the greater portion of the work was also completed on the river route.

WORK DONE BY PARTIES.

Party No. 1, was assembled on July 14, 1905, and disbanded for the winter on December 21, 1905. It reassembled on May 1, 1906, and was disbanded on June 30, 1906. This party was engaged on preliminary work between Chipman and Moncton to October, 1905, and from that date until disbanded were on trial line and preliminary location on the river route.

Party No. 2, was assembled on October 26, 1905, and disbanded for the winter on December 21, 1905. It reassembled on May 1, 1906, and was engaged on revised location on line common to both routes on June 30, 1906.

Parties Nos. 3, 4, 6, 8 and 9, were at work on July 1, disbanded on December 21, 1905, reassembled on May 1, 1906, and were still on work at June 30, 1906. Parties 3 and 4 were chiefly engaged on alternatives and preliminary location on the back route. Parties 6 and 8 were engaged on preliminary lines and location on the river route, and party 9 on preliminary line and location on the back route, and on that portion of the work common to both routes.

Party No. 5, was assembled on October 26, 1905, disbanded on December 21, 1905, reassembled on May 1, 1906, and was still on the work on June 30, being engaged on trial line and preliminary location on the river route.

The drill party was assembled at Plaster Rock in March, but owing to the river breaking up the drill was moved to Fredericton. The bridge survey at that point

6-7 EDWARD VII., A. 1907

was completed in June and the party was moved to Chipman where borings were commenced on the crossing of the Salmon river at that place.

All of the above parties were engaged on the surveys at June 30, 1906, with the exception of party No. 1, which was disbanded on that date.

TOTAL MILEAGE OF SURVEYS RUN BY PARTIES, DISTRICT 'A.'

	To June 30, 1905.	June 30, 1905, to June 30, 1906.	Total to June 30, 1906.
Exploration.....	1,584.20	281.81	1,866.01
Preliminary.....	1,235.40	519.18	1,754.58
Abandoned preliminary lines.....	294.73	37.63	332.36
Preliminary locations.....	0.00	494.21	494.21
Abandoned preliminary locations.....	0.00	84.36	84.36
Revised locations.....	0.00	19.20	19.20
Abandoned revised locations.....	0.00	5.80	5.80
	3,114.33	1,442.19	4,556.52

DISTRICT OFFICE AND STAFF.

Very desirable offices were secured at 55 Canterbury street, St. John, N.B., and the district staff moved from Fredericton to their new headquarters on November 9 last.

CASUALTIES.

No fatal accident or death from any cause has up to date occurred on this district. The health of the men has been good, no serious illness of any kind having occurred.

CONCLUSION.

Character of country traversed, ballast pits, streams to be crossed, earth and rock quantities, and crossings of other railways as described in my last report have not been materially affected by any of the new lines of survey run since June 30, 1905.

Discipline on the several parties has been excellent, and the work done and the results obtained I consider very satisfactory. In no case has the grade exceeded 0.6 per 100 or 21.12 feet per mile rising eastward, compensated, and many of the grades obtained by our surveys run previously to June 30, 1905, have been reduced by our surveys since that date. In no case will it be necessary to exceed the maximum curvature of 6. As the preliminary location on the river route has not yet been completed I have not in this report submitted any comparison of distances on the river and back routes. In a few weeks, however, all the lines will be tied in and I will then be able to submit to you a comparative report of distances, quantities and the cost of work. A pusher grade alternative to the back line was also run east of the Tobique river, which will also be dealt with in the above mentioned report. I might also say from the surveys run to date that the total length across the district has been materially reduced. I attach table showing mileage across district, and amount of work done by the several parties.

GUY C. DUNN,
District Engineer, District 'A.'

SESSIONAL PAPER No. 62

DISTRICT 'B.'

Eight parties have been constantly employed in this district during the year, and three additional parties for a time, but two of the latter have been disbanded. A first location has been completed through the entire district, with the exception of the westerly thirty-four miles. The revision is completed for sixty-five miles south of the River St. Lawrence, and for 132 miles north of the river. Final location has been completed for thirteen miles south of the river, and 126 miles north of the river.

Fuller details will be found in District Engineer, A. E. Doucet's report attached.

HUGH D. LUMSDEN, Esq.,

Chief Engineer, Transcontinental Railway,
Ottawa, Ont.

SIR,—I accordance with your request to prepare a report of the work which has been carried on in my district from July 1, 1905, to June 30, 1906, I beg to submit the following :—

The mileage in this report is counted from Mile 0, on the boundary line between the provinces of New Brunswick and Quebec, at Lake Baker towards Weymontachene, on the St. Maurice river, at Mile 423.

Our first location has been completed from Mile 0 to Mile 423, with the following exception, *i.e.*, from Mile 389 to Mile 423.

We have had eight survey parties in the field throughout the whole year, and three additional parties for a portion of this time, two of the latter being now disbanded.

On the northern shore of the St. Lawrence river our revision has been completed from the Cap Rouge viaduct (Mile 232), to the 364th mile, on the St. Maurice river.

On the south shore of the St. Lawrence river the revision has been completed from Mile 0 to Mile 32, and from Mile 190 to Mile 223, at St. Jean Chrysostome.

The final location on the south shore is finished from Mile 0 to Mile 13, whilst on the north shore it is completed from Mile 232, the Cape Rouge viaduct, to Mile 358, above La Tuque.

The disposition of the survey parties at present is as follows :—

Party 1, is engaged at final location from Mile 0 towards Lake Pohenegamook, Mile 32.

Party 4*a*, is working on a first location of our alternative route from Lake Pohenegamook (Mile 32) towards Lake Chaudière at Mile 90.

Party 1*a*, has finished the first location of our alternative line from the Etchemin river at Abenakis via Armagh, to the 146th mile, and is now endeavouring to eliminate the bend this line makes passing through St. Marcel. Should we be successful in our endeavours, this alternative line will shorten our mileage between Lake Baker and Quebec by some ten or eleven miles.

Party 4, has been at work rechainning and restaking our final location between the Cap Rouge viaduct and St. Adelphe (Mile 293). As soon as this is completed, the party will start our final location from St. Jean Chrysostome eastwards.

Party 5, has been making a contour survey of the La Tuque Flats, and also working on our alternative lines in and about the same point.

Party 5*a*, is revising our final location between Reed's station (Mile 302) and Lac au Chat, Mile 390.

Party 3, is engaged at final location five miles north of La Tuque.

Party 2, is at work on revision of our first location from Mile 364 northwards.

Party 8, is locating our preliminary from Mile 384 towards Weymontachene.

Parties 6 and 9 have been disbanded.

6-7 EDWARD VII., A. 1907

DISTANCE.

In the table of estimated distance submitted in my report of July 1, 1905, I stated that the approximate length of the line in my district from Lake Baker to Weymontachene would be 433 miles. The revised table of distances up to July 1, 1906, is as follows :—

	Miles.	Miles.
From L. Baker to L. Pohenegamook..	32	
L. Pohenegamook to St. Marcel..	92·3	
St. Marcel to St J. Chrysostome..	99·0	
	—————	223·3
Mr. Hoare's division, Quebec bridge..		14·0
From Belair to La Tuque..		115·7
La Tuque to Weymontachene...		70·0
		—————
		423·0

Should the alternative lines now being run on the south shore prove practicable we would save—

	Miles.	
At Lake Pohenegamook....	10	
St. Marcel..	11	
	—————	21
Or a revised total distance,from L. Baker to Weymontachene of..		402·0

My commissaries and storekeeper have given entire satisfaction and have helped very materially in enabling us to prosecute our surveys uninterruptedly. Supplies were cached at different points during the winter so that the remainder of our surveys can be carried on without delay.

The one fatal accident which has taken place in my district since the inception of the surveys, happened in July, 1905, whereby Mr. Wilson, transitman of party 1a, lost his life through the upsetting of a canoe whilst moving camp in Lake Baker. The body was recovered after a week's search and sent in charge of two of our men to his relatives. Mr. Wilson had been employed on our surveys for six months previously, was a thoroughly efficient transitman, and his loss is deeply regretted by all his associates.

Construction is now under way from the Quebec bridge to La Tuque, and on July 1 the contractors had 368 men and 104 horses at work. Most of the month of June was taken up in organization work, always a very slow proceeding, and we will not be in a position to say much about the progress of the work for another month or six weeks.

I attached to this report, for your information, a table of the various descriptions of lines run up to July 1, 1906, also a progress sketch of our first location, revised and final location.

A. E. DOUCET,
District Engineer, District 'B.'

QUEBEC BRIDGE SECTION.

In regard to the section betwen St. Jean Chrysostome and the west end of the Cap Rouge viaduct, under Mr. E. A. Hoare, work is being proceeded with on that portion from the north end of the Quebec bridge to the west end of the Cap Rouge viaduct including the viaduct itself.

SESSIONAL PAPER No. 62

DISTRICT 'C.'

In district 'C,' eight parties were employed in July; four on what is known as the 'North' and four on the 'South' lines, but the following month it having been resolved to abandon the south lines, owing to the fact that the north line was found to be not only the easiest and cheapest to construct, but also passed through a much better agricultural country than the south line, three of the southerly parties were disbanded, and one of them moved on to the easterly end of the north line.

The sixth party was sent out in the middle of May, 1906, and is locating from the Megiskan river eastward.

The first location through this district is well advanced, and I hope by the middle of October to have it completed, with the possible exception of the easterly sixty-five miles, where, owing to the very rough and broken nature of the country, a number of trial lines have been run, and the alternative lines are still being tried, the result so far being, that though the first lines were practicable with our grades and curvature, the later lines will very much decrease both distance and cost of construction.

A summary of the work done will be found in District Engineer A. N. Molesworth's report attached.

HUGH D. LUMSDEN, Esq.,

Chief Engineer, Transcontinental Railway,
Ottawa, Ont.

SIR,—Herewith I beg to submit report of progress of preliminary and location surveys in district 'C,' from July 1, 1905, to June 30, 1906.

As mentioned in my last report, we have been running two lines across the district; one being called the north and the other the south line; they being thirty to forty miles apart.

The south line has had four parties engaged on survey, viz., parties 1, 3 5 and 7.

After the drowning of Mr. H. B. Almon, engineer in charge, and Mr. W. White, transitman, party 7, on June 16 the rest of the party became uneasy and refused to remain in the field, so they were brought back to their homes. On July 1 this party was reorganized and sent out in charge of Mr. J. C. Hyer, with instruction to proceed with survey as laid out for party 7. These four parties pushed ahead with their surveys until about the middle of August, at which time they had run far enough to prove conclusively that the north line was much the better, both as to cost of construction and suitability for settlement, so it was decided to abandon the survey of the south line, and instructions were issued for parties 3, 5 and 7 to come in and disband as soon as they carried their levels through to a connection with the next survey. Party, 1, was instructed to proceed to the eastern end of the north line at Weymontachene, on the St. Maurice river, and run westward to meet party 2, which was running east from the Gatineau river.

Party 1, in charge of Mr. A. L. McDougall, moved to Weymontachene and ran a line up Ribbon river via Hair Cutting lake to a connection with line run by party 2, at a distance of 55.2 miles from starting point, where he arrived December 18, 1905.

This country was very rough, the alignment bad and the summit high, so I instructed Mr. McDougall to return to a point about eighteen miles from Weymontachene and try another line, keeping south of Hair Cutting lake and crossing the northeast fork of the Gatineau at Pitch Pine creek. This he did and ran line through to a connection with party 2 at crossing of the Gatineau, getting a much better line and a summit 250 feet lower than by the northerly route. He is now running close preliminary over this line.

Party 2, which started running eastward from a point near the source of the northwest branch of the Gatineau, had reached their twenty-second mile by June 30, 1905.

6-7 EDWARD VII., A. 1907

Since that time they have run to a connection with party 1 north of Hair Cutting lake, at a distance of 54.7 miles from the starting point, where they arrived November 15, 1905. They then ran several trial lines and finally a line to connect with Mr. McDougall's line south of Hair Cutting lake, where they made connection with party 1 on June 20, 1906, getting a much better line than the one further north. They are now trying another line, which, if feasible, will shorten the road several miles, and from what information we now have I think it will turn out all right. From the Gatineau to the St. Maurice is much the most difficult part of this district, and being unexplored with few of the lakes and rivers shown on map, it will require very careful examination in order to get the best line.

Mr. R. A. Hazelwood in charge of party 4, had run thirty-seven miles up to June 30, 1905, and continued westward encountering a very rough country with ridges running at right angles to the direction of the line. After running to the fifty-fifth mile he tied on to a line run by party 6, who were working eastward from Bell river and had reached their fifty-eighth mile. After looking over the country Mr. Hazelwood decided to commence at the end of the line surveyed by party 6 and run eastward, keeping several miles north of his first line, and reached a point about eight miles north of his starting point at the eighty-fifth mile. This country from the fifty-eighth to the eighty-fifth is rough and will require a good deal of careful work to get a good line, although on our first preliminary we have had no trouble in getting the required grades. Mr. Hazelwood resigned his position in March, and his transitman, Mr. I. J. Steele, carried on the work making a connection with Mr. Haycock's survey on June 30, and getting a comparatively good line with the necessary grades and curvature.

Party 5a, was organized about May 15 and sent out in charge of Mr. W. R. Maher to locate eastward from the Megiskan river, where Mr. Wilgar started his location westward. It took him two or three weeks to get on the ground and get his survey in working order, so he is just well under way up to date.

Party No. 6, in charge of Mr. W. P. Wilgar, had run forty miles up to June 30, 1905, and by August 15 had run to mile 58, where he made connection with party 4. He followed up the Atik River valley most of the way and got a comparatively good line. After making connection with party 4, Mr. Wilgar came into Ottawa to report, and returned to his party by September 15, and after getting some supplies ahead to convenient places he commenced at the Megiskan river to run first location westward. By May 12, 1906 he had run 58.3 miles to a connection with location of party 8, getting a very good line without exceeding the maximum grades and curvature. Mr. Wilgar then brought his party in, arriving at Ottawa, June 2, and Mr. R. F. Davy was sent out with a new party to revise Mr. Wilgar's location, and up to date has run several miles.

Party 8 had up to June 30, 1905, run forty-three and a half miles. They had trouble in keeping men in the field, but finished their preliminary, making connection with district 'D,' at Fly river, on October 12, 1905. On account of winter setting in early they had great trouble moving back with party to start first location, but finally arrived there late in December.

They commenced first location at a point ten miles east of the Hurricanaw river, and by June 25, 1906, had finished 53.52 miles to a connection with party 2, district 'D.' This country is comparatively level, and they got good line with light work. After finishing to a connection with district 'D,' Mr. W. D. Robertson, in charge of the party, in accordance with instructions moved his party south of Lake Makimik to run a line through to a point several miles west of the Hurricanaw river. If this proves practicable it will be a great improvement.

The transport service have carried out their work in a much more satisfactory manner during the past year, and each party has been very well supplied with provisions, &c. We have put caches at a distance of twenty-five to thirty miles apart across the whole district. These caches are kept supplied with provisions by the trans-

SESSIONAL PAPER No. 62

port parties, and each engineering party has its own packers who haul the provisions from the caches to their camps, as required. We cut new roads further in towards the line last winter and sent out supplies enough over these roads to last a year. These supplies are hauled out by contract to the extreme northern limit of our roads and there stored, in some cases in care of the Hudson's Bay Company, until spring. They are now being forwarded to our different caches by the Indians and our own men, and fully fifty per cent have been delivered up to date. We find that the most satisfactory arrangement we have yet is by the Indians who have had much experience in just this kind of work in handling the Hudson's Bay Company's supplies for many years, and they are the only people we find who can deliver goods satisfactorily by canoe.

I regret to have to report three deaths by drowning, and one serious illness during the past year.

The first was Frank McGrath of the transport service. On October 27, 1905, he and three men were on their way to cache No. 2, northeast branch of the Gatineau river. Before reaching the cache they had to abandon their canoe on account of the ice, and they attempted to reach the cache by walking. McGrath broke through the ice and in spite of all the efforts of his companions he was drowned. The body was recovered a few days later and brought to Ottawa for burial.

The second, Geo. R. McKay, axeman on party 6, who, not feeling well, started for Grand Lake Victoria main cache, where he could be under the doctor's care, but the first night out he was taken with a severe attack of inflammation of the bowels and before anything could be done to relieve him he died on February 5, 1906. His body was brought to Ottawa.

The third, L. G. Bourgeois, chainman, party 8, was drowned, caused by the upsetting of a canoe in small rapids on Whitefish river. Bourgeois clung to the canoe while the other three men who were with him swam ashore. The canoe was rolling a good deal and he apparently lost his hold and sank never to come up again alive. His body was found two weeks later, when it was placed in a coffin and buried by the Roman Catholic church in their cemetery at Lake Abitibi Post. This accident occurred May 20, 1906.

The fourth was Angus McDonough, assistant cachekeeper at Megiskan river cache, who was drowned while bathing on June 7 last. There was no one near him at the time so it was impossible to tell how it happened. The body was recovered the same evening and brought to Ottawa for burial.

I attach herewith a table of estimated distances, miles of preliminary line run and abandoned, and miles of first location.

A. N. MOLESWORTH,

District Engineer, District 'C.'

DISTRICT 'D.'

In July of last year there were eight parties in the field, but on the abandoning of what is known as the south line in this district (for similar reasons as on district 'C') parties 1 and 3 were disbanded, and parties 5 and 7 moved to the north line. Several alternative lines have also been run over portions of this district, and by the middle of October I hope to have a first location completed through this district.

Details of the work done will be found in District Engineer, S. R. Poulin's report attached.

HUGH D. LUMSDEN, Esq.,

Chief Engineer, Transcontinental Railway,
Ottawa, Ont.

SIR,—I have the honour to submit the following report of the work done in my district from July 1, 1905 to June 30, 1906.

6-7 EDWARD VII., A. 1907

On July 1, 1905 we had eight parties in the field; four of them were working on the northern route, which passed north of Lake Abitibi, and four of them on the southern route, south of Lake Abitibi.

According to your instructions the southern route was abandoned as soon as word could be sent to the parties in the field, and parties Nos. 1 and 3 were disbanded, while parties 5 and 7 were moved to the northern line in the month of December, 1905.

The mileage in this report is counted from Mile zero, the junction point with district 'C,' which is about five miles east of the north end of Lake Makamik, westward to the junction with district 'E,' at a point five miles east of the Kebinakagami river at mile 247.8.

The preliminary surveys have been completed over the whole distance on the northern route, and also an alternative middle route from mile 50 to mile 195. Our first location has been completed on the northern route from mile zero to mile 98, the crossing of the Abitibi river, and also from mile 175 to mile 247.8.

The results of all these surveys have led me to select what I call the 'Middle Alternative Route,' it being the most direct route, and also easier gradients, and cheaper construction.

We have now six parties in the field, viz., Nos. 2, 4, 5, 6, 7 and 8.

Party No. 2, who had completed the first location from mile zero to mile 50 has also run a preliminary survey from mile 29 to the south end of Lake Makamik, and is now engaged in running an alternative location from mile 50 eastward to the south end of the said lake.

Party No. 4, who had completed the first location from mile 50 to mile 98 located also six miles from mile 98 to mile 104 on the alternative middle route, and is now engaged completing this first location on the middle alternative route from mile 198 eastward to mile 50. I expect it to be through by September 1.

Party No. 5 ran two alternative preliminary surveys from mile 98 to mile 145 along the originally projected northern route, and also a preliminary survey on the middle alternative route, from mile 134 eastward to the Abitibi river. The same party has also completed its first location on this middle alternative route from mile 104 to mile 112, and will continue the location westward to mile 145, which will be also completed before the end of September.

Party No. 6, which was originally party No. 5, working on the southern route, has only worked on the northern route since January 22. The party has run one preliminary survey on the middle alternative route from mile 134 to mile 170, and an alternative preliminary line along the same route, some two or three miles further south, from mile 134 to mile 160, and is now engaged completing the same to mile 175, which should be completed shortly, and I expect the same party will have the first location completed between mile 145 and 165 by the end of September.

Party No. 8, ran a preliminary line on the northern route from mile 145 to mile 213, and also a preliminary line on the south alternative route from mile 165 to mile 213. The same party had also completed on June 30, the first location over the alternative middle route, from mile 175 to 199½. This party is now engaged in running an alternative preliminary line, one to two miles further south to meet party No. 6.

Party No. 7, moved on to the northern route and commenced to work on the Missanabie river on January 1, 1906, completed the preliminary line from mile 213 west to mile 247.8, and also completed the first location from mile 247.8 eastward to mile 199½, joining there with party No. 8. This party is now engaged in completing the first location, following party 8 until they join with party 6, so that I expect by the end of September the first location will be completed over the whole of this adopted middle route.

The whole distance over my district as originally estimated was 254½ miles. The first corrected survey over the northern route gave me 252 miles. The total distance over the now proposed middle route will be 247.8 miles, the shortening of the distance being mostly from mile 50 to mile 165.

SESSIONAL PAPER No. 62

Should the alternative line, passing south of lake Makamik at the junction of my district with district 'C,' prove feasible we would save two and a half miles in my district, and probably as much, if not more, in district 'C.'

I regret to have to record three cases of drowning in this district during the year.

F. Cook and Jos. Legault, of party No. 1, were drowned on August 10, 1905, on the Kenojevis river. These two men were drowned while on a pleasure excursion after supper.

J. P. Gibbons of the transport service was drowned on November 4, 1905, in the Dancing rapids, trying to run the rapids in a pointer boat. The same party who had accompanied me on my inspection tour two months previous, had been told by myself not to run the said rapids.

In general the health of the different parties has been fairly good. There have been several cases of scurvy, which fortunately disappeared, the more serious cases happening in the western end of the district where the men have remained on the work for a longer period, and where it was more difficult to get out on account of the distance. Dr. McLeod and Dr. Johnston visited periodically the different parties and attended to their wants.

Great difficulties were at first experienced in getting in supplies, but these have been overcome, advantage of the winter months being taken to get in an ample supply of provisions, sufficient to last all the parties in my district until June 1, 1907. These are all well stored in different caches along the line, in charge of cachekeepers and assistants, who deliver the provisions and goods to the different parties on requisitions from the engineers in charge.

For your information I attach to this report a table giving the various descriptions of lines run from July 1, 1905, to June 30, 1906, by the different parties, and the mileage of each, and also a progress sketch of the preliminary surveys, and first location done during the year.

S. R. POULIN,

District Engineer, District 'D.'

DISTRICT 'E.'

On July 1, 1905, there were four parties in the field, but No. 2 was disbanded in February, and a new party was sent out in June. Up to the end of June, 1906 over 188 miles of first location has been completed, and I hope to have it finished through the entire district by October 1. Details of work done in this district will be found in Acting District Engineer, Hanington's report attached.

HUGH D. LUMSDEN, Esq.,

Chief Engineer, Transcontinental Railway,
Ottawa, Ont.

SIR,—I have the honour to submit report of work done on district 'E' between July 1, 1905, and June 30, 1906, as follows :—

District 'E,' begins at a point five miles east of the Kebinakagami river and runs west to the height of land, which divides the waters flowing into Nepigon lake from those that run to the north into Hudson's Bay. As this watershed is irregular in shape, the length of district 'E,' depends upon the point at which it is crossed by the line northwest of Lake Nepigon. If, as I imagine, the northern line of the two in that locality is adopted, the length of district 'E' will be approximately 270 miles.

On July 1, 1905, there were four parties in the field :

Party 1, under Mr. A. McLellan, was working west from the east end of the district, running exploratory lines on what is known as the southern route.

6-7 EDWARD VII., A. 1907

Party 2, under Mr. R. W. Coldwell, was at Negogami river running preliminary lines easterly on what is known as the northern route.

Party 3, under Mr. W. D. MacKay, was at Kawakashkagama river, running preliminary lines easterly on a route which is common to both the northern and southern routes.

Party 4, under Mr. J. S. Tempest, was at Bald Headed lake, running exploration lines westerly.

In January last Mr. W. H. Mitchell succeeded Mr. A. McLellan as engineer in charge of party No. 1.

In February last party 2 was disbanded, and in June a new party under Mr. R. D. Fry was sent out to begin location from the east end of the district towards the west.

In February last Mr. H. M. Balkam replaced Mr. MacKay as engineer in charge of party 3.

Since July 1, 1905 the following lines have been run on this district :—

	Exploration.	Preliminary.	First Location.	Abandoned.	Total.
Party 1.....	87·0	91·0	24·0	7·6	209·6
" 2.....	65·4	16·6	.....	9·4	91·4
" 3.....	36·8	223·5	74·6	12·7	347·6
" 4.....	86·1	63·4	90·0	18·1	257·6
Total.....	275·3	394·5	188·6	47·8	906·2

Party 1, began location at English river on May 1 of this year, and is working east.

Party 2, has just started location at the east end of the district, and is running west to meet party 1. I expect these parties to join about September 15.

Party 3, began first location on February 1 and is running west.

Party 4, began first location at the west end of district on November 1, 1905, and is running east. I expect parties 3 and 4 to meet about August 15.

The main difficulties on that part of the country lying between the east end of the district and English river are caused by the fact of the valleys lying at right angles to the line, and this necessitates some increase of distance in order to make grade between the river crossings. Between English river and Robinson lake a more difficult country is encountered, but there is no work of very heavy character, there being very little rock work, the material generally being clay, sand or clayey loam until the summit of Red Paint river is reached. From there to Robinson lake, a distance of about twenty-eight miles, a more broken country is met with and considerable rock occurs. In the section from Robinson lake to the west end of district 'E,' the most difficult work on this district appears, the principal features of this part of the country being isolated rocky ridges between which lie innumerable lakes. A great deal of exploratory work was necessary to determine the best route upon which we could get the required grades and curvature. I am glad to be able to report that a good line has been found with grades not exceeding 0·4 per cent per hundred, or 21·2 feet per mile, rising east and 0·5 per cent per hundred, or 26·4 feet per mile, rising west, except in a few instances where it will probably be found advisable to allow a few short pieces of 0·6 per cent, or 31·7 feet per mile, rising west. All grades are compensated for curvature at the rate of four-hundredths of a foot per degree of curvature.

The following is a list of the bridges required over the principal rivers of this district :—

SESSIONAL PAPER No. 62

Name of River.	Length. Ft.	Height. Ft.
Kebinakagami.....	250	45
White....	300	30
Skunk..	300	65
Negogami....	400	58
Pegatchewan....	500	70
Flint..	350	20
English..	300	50
Kawakashkagama....	150	10
Grass creek..	700	40
Roaring creek...	500	60
Camp...	600	55
Jackfish....	500	50
Mud..	500	70
Burnt creek....	500	35

TRANSPORT DEPART.

On February 1, 1905 the Transport Department was handed over to the Engineering Department, to the very great improvement of the service. The work of transporting supplies from Grassett to Cache 9, was let by contract and the supplies moved by teams in winter to the foot of Kebinakagami lake, and in the spring by canoe to Cache 9. A new cache and dwelling house was built at the line crossing of the Kebinikagami river and a year's supplies of goods have been delivered in good order before this date of writing.

At Montizambert a contract has been let for the transporting of supplies to new cache 9A, on Negogami river, also for the erection of new buildings at the line crossing of this river, and a year's supply of provisions will be in that cache by the middle of August.

At Jackfish, a warehouse was erected about two miles from the station, on land leased from the Canadian Pacific railway. The contract was let for the transporting of supplies from this point to caches 10, 10A, 11, 11A and 12, at a much less rate than heretofore, and a year's supply of goods will be delivered at all these caches before the end of July.

At Nepigon a warehouse was leased from the Canada Fish Company in which to store our goods. A contract was given for the transporting of supplies from Nepigon to caches 12A, 13, 14, 15, Ombabika and Wabinosh warehouses and cache 16, which is on district 'F.' A very large saving was effected at this point over the previous year, when this work was done by the Transport Department by day labour. A year's supply of everything necessary for the health and comfort of the engineering parties will be in all the caches and warehouses in this district by the end of August at the outside.

I regret to state that Mr. C. E. Perry, District Engineer, left here on December 20 very unwell. He went to the hospital in Ottawa and died there on March 15 of this year. His death was very much regretted by his staff here, of whom I was one, and by his very many friends scattered through Canada, from the Atlantic to the Pacific.

CASUALTIES.

I also regret to report that A. Chouinard of party 2 was drowned on August 26, 1905, in a small lake which has since been named after him. Evidently the man had a fit, as the canoe was not upset and the body was found in shallow water, through which he could have waded to shore. The body was properly buried, a funeral service held and the grave marked with a cross, bearing date of death, &c.

6-7 EDWARD VII., A. 1907

Also Oscar Rainfield, mail carrier, who was drowned in the Kebinakagami river on October 8 last. This accident was caused by the breaking of a paddle while running a rapid, and the body was not recovered until June of this year, when Mr. J. S. Lothian, transport officer found it on the shore of the river, near where the accident occurred. The body was properly interred by Mr. Lothian. We have been unable to find any trace of Rainfield's connections or relatives. The only thing known of him is that he stated he came from the old country in the Hudson's Bay Company's boat.

C. F. HANINGTON,

Acting District Engineer, District 'E.'

DISTRICT 'F.'

In this district up to the middle of May last there were from nine to eleven survey parties employed, after which date two parties were disbanded. Four parties are now employed on preliminary and location surveys east of the Grand Trunk Thunder Bay Branch junction, and the remaining parties have been reorganized in divisions on constructions. I hope by October 1 to have the first location fully completed, between the junction of the Grand Trunk Thunder Bay branch and the easterly end of this district.

Details of the amount of work done will be found in District Engineer Hodgins's report attached.

HUGH D. LUMSDEN, Esq.,

Chief Engineer, Transcontinental Railway,
Ottawa, Ont.

SIR,—I have the honour to submit the following report of the work carried on in this district 'F,' from July 1, 1905, to June 30, 1906.

On the portion of the district under construction the mileage runs from Zero, at Peninsula Crossing of the English river westward to east boundary of St. Boniface, 246·8 miles. The balance of the district east of Zero to Mattice lake is 131·2 miles.

First location from Zero to St. Boniface was completed in January. Since that date revision and final location have been completed, with the exception of twenty miles of an alternative line near the Wabigoon river. Final location of 4·3 miles shorter than first location between the above mentioned points.

Nine survey parties have been in the field continuously, and two extra parties from December, 1905 to May, 1906. Since then two parties have been disbanded and five parties reorganized for construction. The remaining four parties have been employed on preliminary and location surveys east of Zero.

Party 1, preliminary and location, Mattice lake east to Allan Water.

Party 2, preliminary and location, Allan Water to Trappers Cabin (8 Miles lake).

Party 5, preliminary and location, Trappers Cabin to Dog lake.

Party 10, preliminary and location, Dog lake to English river, Zero.

Party 4, now construction, division No. 5, from Zero to mile 46.

Party 3, now construction, division No. 6, from mile 46 to mile 91.

Party 6, now construction, division No. 7, from mile 91 to mile 141.

Party 7, now construction, division No. 8, from mile 141 to mile 182.

Party 8, now construction, division No. 9, from mile 182 to Winnipeg.

Parties 9 and 11 have been disbanded, and absorbed into other parties and divisions.

As there are not many labourers employed on the portion under construction, we are still revising final location where possible improvements are suggested by engineers.

TRANSPORT.

The transport service has given satisfaction. Supplies are cached at the following points :—

Lake Onamakawash, for party....	1
Trappers Cabin, for party....	2
Dog lake, for party	5 and 10
Lost lake, for division....	5
Good lake, for division....	and 6
Wabigoon Falls, for division....	6
Winnipeg river, for division....	7
Ingolf station, for division..	8
Whitemouth, for division.....	9

CASUALTIES.

I regret to report the following death from drowning in this district :—

Major Villers Sankey and two men; John Hull and E. P. Beauchamp were drowned in Manitou lake, July 10, 1905, and October 13 four men, Anton Lorenson, Fred. Crooks, William Porter and John A. Brown were drowned in the Winnipeg river. Reports of these accidents are contained in previous letters.

Last winter there were several cases of frozen feet and toes, most of them being caused by the accumulation of slush on the lakes.

Mr. Howard A. Dunlop, assistant cachekeeper at Dog lake froze both feet badly on January 23 coming down Sturgeon river. Portions of both feet have been amputated.

Edwin Kipling, a half-breed dog driver, got his feet frozen on February 5 coming down Sturgeon lake. He tried to go across some slush with the dogs and could not get out. He was rescued by some of his companions, who had gone around the slush and came back with a team from camp. Portions of both feet have been amputated.

Both these men are out of the hospital.

Construction was started at various points west of Winnipeg river by contractor J. D. McArthur in May.

Average force on the work in May....	63
Average force on the work in June....	467

Attached are tabulated statements of description of lines run and progress sketch.

A. E. HODGINS,
District Engineer, District 'F.'

As we now have lines connected through the entire distance from Moncton to Winnipeg, I am in a position to give a general idea of the country throughout.

From Moncton to Weymontachene, on the St. Maurice river, the country has been known and more or less settled for years, but westerly from the last mentioned point very little reliable information was obtainable until now. The country passed through from Weymontachene, for the first hundred miles westerly, has been found to be very rough and broken, and moderately so for fifty miles more, but after crossing the headwaters of Obaska lake the country is generally much flatter, and the work of construction from there to the boundary between the provinces of Quebec and Ontario, a distance of say 120 miles, will be comparatively easy, and though timber is generally scarce in this section, with the exceptions of strips along the valleys of the streams, it would appear that there are considerable areas of fairly good soil suitable for settlement.

From the Ontario boundary westerly to within ten miles of the Kashkagama river, a distance of, say 402 miles, the country consists generally of clay loam, with here and

6-7 EDWARD VII., A. 1907

there sandy ridges, small areas of muskeg or swamps, but these latter are only covered with from 2 to 4 feet of moss, with clay subsoil. Light work will be obtained throughout this entire distance, with the exception of the approaches to several of the river crossings where it will be heavier, but very little rock is met with. There is some fairly good timber to be found in the valleys of the streams, principally spruce, birch and poplar. Owing to the number of streams to be crossed, all of which flow northerly to Hudson Bay, the amount of bridging will be considerable, though none of them are of very great lengths some of them are a considerable height above the streams. A large portion of the country generally, not only along the line itself, but for a number of miles north and south of it, is reported as being well suitable for settlement.

From the last mentioned point westerly to the junction with the Grand Trunk Thunder Bay branch the country for the most part is rough and broken, and interspersed with numerous lakes and rocky ridges, there being very little or no agricultural land west of Lake Nepigon, but the work of construction generally will be lighter than it is west of that junction. From the junction westerly for, say 185 miles, the work is very heavy, and consists largely of rock cuttings and timber trestles, very little agricultural land, and only here and there small areas of timber of any merchantable value.

From the 185th mile westerly to Winnipeg, a distance of, say 66 miles, the country may be called prairie, and the work will be generally light. The westerly thirty miles passes through excellent farming country.

SUMMARY OF MILEAGE OF VARIOUS LINES RUN.

—	District A.	District B.	District C.	District D.	District E.	District F.	Total.
Exploration.....	281	261	112	895	275	562	2,386
Preliminary.....	557	1,012	685	450	394	912	4,010
First location.....	579	431	117	189	189	279	1,784
Revised location.....	25	367	6	.....	.....	220	618
Final ".....	.....	135	.....	.....	.....	223	358
Total.....	1,442	2,206	920	1,534	858	2,196	9,156

CONSTRUCTION.

Tenders were called for on February 8, 1906, for the construction of 150 miles from the Quebec bridge westerly in district 'B.' and for the steel superstructure of the large viaduct over the valley Cap Rouge ; also from a point a few miles east of Winnipeg to the approximate junction of the Thunder Bay branch of the Grand Trunk Pacific near Peninsula crossing, longitude 92 degrees, a distance of, say 244 miles in district 'F.' The contract for the 150 miles in district 'B' was awarded to Messrs. Hogan & Macdonell of Montreal on the 15th day of May, 1906, and that for the 244 miles east of Winnipeg to Mr. J. D. McArthur of Winnipeg on the same date. The contract for the viaduct at Cap Rouge was awarded to the Dominion Bridge Company of Montreal on the 21st day of May.

Work is proceeding on these contracts.

In conclusion I deeply regret to report the following deaths and casualties of members of my staff during the past year.

Mr. Charles E. Perry, district engineer, district 'E,' with headquarters at Nepigon, came to Ottawa about December 21, 1905, and though at first it was not supposed that anything very serious was the matter, he gradually grew worse and died on March 15

SESSIONAL PAPER No. 62

at St. Luke's hospital, and was buried in Ottawa, much regretted by a large circle of friends.

Mr. Geo. R. McKay, axeman, party 6, district 'C,' died en route from party to Grand Lake Victoria, on February 5, 1906, his body being sent to Ottawa for burial.

The following is a list giving names, occupations, dates, &c., of deaths by drowning during the year of persons connected with various survey parties. These include one engineer in charge of party, Mr. Villers Sankey, who was well known throughout Ontario, and whose death is much regretted; one transitman, one chainman, two mailcarriers, one transport man, one cachekeeper, and nine axemen and packers.

Mr. Villers Sankey, engineer in charge, E. P. Beauchamp and John Hull, axemen, party No. 9, district 'F,' were drowned in Manitou lake on July 10, 1905, caused by the swamping of their canoe. Mr. Sankey's body was recovered and sent to Toronto for burial, Hull was buried at Kenora, Ont., but Beauchamps body has not yet been recovered.

Mr. R. F. Wilson, transitman, party 1A, district 'B,' was drowned on August 4, 1905, in Long lake, being upset out of a canoe. His body was recovered and sent to his home for burial.

Jos. Legault and Fred. Cook, axemen, party 1, district 'D,' were drowned in the Kenojevis river on August 10, 1905, by being upset out of a canoe. Both bodies were recovered; Cook being buried at New Liskeard and Legault's body sent to Ottawa for burial.

Fred. Chouinard, packer, party 2, district 'E,' was drowned on August 26, 1905, in a small lake east of the Kebinagogami river. It is supposed that he had a fit and fell out of the canoe, as it was found floating upright, and there being only a few feet of water where he was drowned. His body was recovered and buried near the scene of the accident.

Anton Lorensen, Fred. Crooks, William Porter and J. E. Brown, axemen and packers, party 7, district 'F,' were drowned in the Winnipeg river on October 13, 1905. They were moving camp when the canoe swamped and sank. Lorensen and Crooks were buried at Kenora, and Brown's body was sent home to Mangerville, N.B., for burial. Porter's body has not yet been recovered.

Oscar Rainfield, mailcarrier, party 1, district 'E,' was drowned on October 8, 1905, in the Kebinakagami river, being upset out of a canoe in the rapids. His body was recovered and buried on the bank of the river.

Frank McGrath, transportman, district 'C,' was drowned on October 27, 1905, in the mouth of a small creek, latitude 45 degrees, longitude 74 degrees 51 minutes. He broke through the ice into about 5 feet of water with a soft muddy bottom. His body was recovered and sent to Ottawa for burial.

John Gibbons, mailcarrier, district 'D,' was drowned in the Dancing rapids of the Abitibi river, on October 27, 1905, while attempting to run the rapids in a pointer boat. His body was recovered in the spring and brought out to North Temiskaming for burial.

Louis Bourgeois, chainman, party 8, district 'C,' was drowned on May 20, 1906, in the Whitefish river, being upset out of a canoe while landing at a portage. His body was recovered and buried at the Hudson's Bay post on Lake Abitibi.

A McDonough, cachekeeper, district 'C,' was drowned on June 7, 1906, in the Megiskan river, being upset out of a canoe. His body was recovered and brought to Ottawa for burial.

HUGH D. LUMSDEN,

Chief Engineer.

DISTRICT 'A.'

REPORT and Description of Lines run from July 1, 1905, to June 30, 1906.

Party.	Explora- tion.	Prelimin- ary.	First Location.	Revised Location.	Final Location.	Remarks.
1.....	20·00	45·80	81·18	.....	.....	Disbanded Dec. 21, 1905. Reorganized May 1, 1906.
2.....	11·00	7·12	46·64	15·00	.....	" "
3.....	165·50	118·22	74·90	4·20	.....	" "
4.....	4·91	78·26	70·60	.....	.....	" "
5.....	9·70	25·50	50·16	.....	.....	" "
6.....	9·75	108·90	54·04	.....	.....	" "
8.....	60·47	111·84	50·42	.....	.....	" "
9.....	0·48	23·54	65·91	.....	.....	" "
Total...	281·81	519·18	493·85	19·20	.....

NOTE.—Abandoned first location.... 84·36 miles.
" revised location. .. 5·80 "

GUY C. DUNN,
District Engineer, 'A.'

DISTRICT 'B.'

REPORT and Description of Lines run from July 1, 1905, to June 30, 1906.

Party.	Explora- tion.	Prelimin- ary.	First Location.	Revised Location.	Final Location.	Remarks.
1.	10·00	75·90	35·00	40·75	12·60	
1a	5·50	117·85	71·75	54·88	.....
2.....	46·12	77·40	32·90	51·79	17·88	
3.....	8·30	93·25	32·30	36·70	5·00	
4.....	12·80	89·59	41·00	97·10	40·20	
4a	63·66	144·99	70·43	11 00	.....
5.....	.....	163·55	43·33	53·20	29·10	
5a	35·20	38·22	.....	17·80	28·88	
8	13·05	63·84	63·43	3·50	1·30	
9.....	30·00	82·09	41·00	.....	.....	Party disbanded March, 1906.
6.....	36·60	65·77	.....	.....	.....	" December, 1905.
Total...	261·23	1,012·45	431·14	366·72	134 96	

A. E. DOUCET,
District Engineer, 'B.'

DISTRICT 'C.'

REPORT and Description of Lines run from July 1, 1905, to June 30, 1906.

Party.	Explora- tion.	Prelimin- ary.	First Location.	Revised Location.	Final Location.	Remarks.
1.....	24·00	Disbanded August, 1905.
1a.....	17·60	153·20	.....	.....	.....
2.....	20·75	52·14	.....	.....	.....
3.....	41·50	Disbanded September, 1905.
4.....	28·00	143·75	.....	.....	.....
5.....	.....	32·70	.....	.....	.....
5a.....	25·50	6·50	Disbanded September, 1905.
6.....	26·65	69·45	58·25	6·40	.....
7.....	.....	28·80	.....	.....	.....
8.....	18·65	114·20	52·50	.....	.....
Total...	111·65	685·24	117·25	6·40	

A. N. MOLESWORTH,
District Engineer, 'C.'

DISTRICT 'D.'

REPORT and Description of Lines run from July 1, 1905, to June 30, 1906.

Party.	Explora- tion.	Prelimin- ary.	First Location.	Revised Location.	Final Location.	Remarks.
1.....	38·00	24·00	.....	.....	.....	Disbanded October, 1905.
2.....	129·00	58·00	52·00	.....	.....
3.....	55·00	18·00	.....	.....	.....	Disbanded November, 1905. Suspended work for one month. Suspended work for two months.
4.....	156·00	48·00	55·00	.....	.....
5.....	158·00	7·00	8·00	.....	.....
6.....	178·00	74·00	.....	.....	.....
7.....	108·00	93·00	48·00	.....	.....
8.....	73·00	128·00	26·00	.....	.....
Total...	895·00	450·00	189·00	.....	.....

S. R. POULIN,
District Engineer, 'D.'

6-7 EDWARD VII., A. 1907

DISTRICT 'E.'

REPORT and Description of Lines run from July 1, 1905, to June 30, 1906.

Party.	Explora- tion.	Prelimin- ary.	First Location.	Revised Location.	Final Location.	Remarks.
1.....	87·00	91·00	24·00	.....	.....
2.....	65·40	16·60	.....	.....	.....
3.....	36·80	223·50	74·60	.....	.....
4.....	86·10	63·40	90·00	.....	.....
Total..	275·30	394·50	188·60	.....	.....

NOTE.—Miles abandoned, 47·80.

C. F. HANINGTON,
Acting District Engineer, 'E.'

DISTRICT 'F.'

REPORT and Description of Lines run from July 1, 1905, to June 30, 1906.

Party.	Explora- tion.	Prelimin- ary.	First Location.	Revised Location.	Final Location.	Remarks.
1.....	67·61	78·90	25·19	.....	.....	Party organized July 1, 1905.
2.....	138·60	133·70	.....	.....	.....	" " 1, 1905.
3.....	45·00	100·40	35·50	28·80	20·00	
4.....	19·00	103·80	34·50	36·30	49·94	
5.....	8·00	121·10	34·50	23·70	.....
6.....	19·00	110·96	35·00	12·30	50·14	
7.....	70·80	89·20	27·00	15·80	21·52	
8.....	90·80	28·41	15·02	16·00	6·60	
9.....	62·10	84·70	23·70	9·80	12·00	
10.....	25·90	47·80	24·40	31·00	.....	Party organized December 1, 1905.
11.....	16·00	13·30	24·30	47·00	63·00	" " 1, 1905.
Total...	562·21	912·27	279·11	220·70	223·10	

NOTE.—Alternative location, 130·52 miles.

A. E. HODGINS,
District Engineer, 'F.'

THE COMMISSIONERS OF THE TRANSCONTINENTAL RAILWAY.

STATEMENT of Expenditure for the Fiscal Year ended June 30, 1906.

Salaries—Commissioners and staff.. . . .	\$ 90,703 60	
Travelling expenses....	3,682 24	
Rent—General Offices	11,222 25	
General expenses..	17,560 64	
Stock—Headquarters..	72,145 63	
Furniture and Fixtures.....	3,602 93	
Freight and Express	2,385 14	
Telegraph and Telephone..	2,705 61	
Insurance..	1,012 98	
Advances	9,289 65	
Legal Expenses	490 00	
Grand Trunk Pacific—Interest..	603 05	
Accidents and Casualties	853 30	
		<hr/> \$216,257 02

District 'A'—

Pay-roll—Surveys..	\$ 59,801 68	
Supplies—Surveys...	25,514 55	
		<hr/> 85,316 23

District 'B'—

Pay-roll—Surveys..	\$ 138,582 11	
Pay-roll—Transport..	2,995 00	
Pay-roll—Construction..	2,038 05	
Supplies—Surveys.....	47,704 45	
Supplies—Transport..	6,269 13	
Supplies—Construction..	1,505 25	
		<hr/> 199,093 99
Contracts..		15,860 08
		<hr/> \$516,527 32

District 'C'—

Pay-roll—Surveys..	\$ 70,720 31	
Pay-roll—Transport....	61,172 44	
Supplies—Surveys..	62,853 06	
Supplies—Transport...	57,394 19	
		<hr/> 252,140 00

District 'D'—

Pay-roll—Surveys..	\$ 92,327 49	
Pay-roll—Transport..	26,637 19	
Supplies—Surveys...	78,644 74	
Supplies—Transport..	36,419 54	
		<hr/> 234,038 96

District 'E'—

Pay-roll—Surveys	\$ 66,699 60	
Pay-roll—Transport	17,059 35	
Supplies—Surveys..	48,343 66	
Supplies—Transport...	22,323 72	
		<hr/> 154,426 33

6-7 EDWARD VII., A. 1907

District 'F'—

Pay-roll—Surveys.....	\$ 130,464 86
Pay-roll—Transport..	15,083 50
Pay-roll—Construction..	7,924 90
Supplies—Surveys..	107,131 51
Supplies—Transport..	13,067 51
Supplies—Construction...	12,887 88
	<hr/> 286,560 16
Contracts...	35,379 00
	<hr/> \$1,479,071 77
Amount expended for purchase of Grand Trunk Pacific surveys east of Winnipeg within zone of main line surveys of Transcontinental Railway—as per reports of auditors, dated February 7, 1905, and May 9, 1905—(Paid by cheque of Finance Department)..	
	\$ 352,191 73
	<hr/> \$1,831,263 50
	<hr/>

D. HOCTOR,
Chief Accountant.

To the Commissioners of the Transcontinental Railway.

GENTLEMEN,—I have the honour to submit the following statement of purchases made in the different provinces and also Great Britain and United States during the fiscal year ended June 30, 1906.

Province of Ontario..	\$ 159,078 18
“ Quebec...	105,551 69
“ Manitoba..	42,937 44
“ New Brunswick..	4,785 44
“ Nova Scotia..	97 82
Great Britain....	4,689 74
United States....	1,188 41
	<hr/> \$ 318,328 72
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Yours respectfully,
A. L. OGILVIE,
General Purchasing Agent, Transcontinental Railway.

